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DESCRIPTIVE CATALOGUE

— OF —

FRUIT AND ORNAMENTAL TREES,


SHRUBS, VINES, ROSES, Etc.



GRIMES' GOLDEN APPLE
IN BEARING.

PAN HANDLE NURSERIES,

J. K. HENBY & SON, Prop'rs,

GREENFIELD,  INDIANA.



INTRODUCTION.

In 1873 I began my first experience in the nursery business as tree salesman. Having been discharged from the army eight years before with a useless right arm I struggled along as best I could at first one thing and another when one day I picked up a catalogue of fruits and seeing an opening started out selling with the catalogue under my arm, on foot, staying with the good farmers whenever night overtook me. Virtually a tramp, I had a hard time of it, being a stranger with very little experience, but I stuck to it and perseverance won; furnishing good stock, true to name and in good order, and above all dealing squarely with the people I soon built up a trade that I could not attend to myself, and I hired my first salesman, but this soon became inadequate and there was added another and another until the amount I sold was enormous. During the time I had saved up a nice snug sum and bought the farm where the nursery now lies, paying part down and putting a plaster on the whole to cover the balance. There I planted the first apple block in this part of the country, branching off on the different fruits as experience justified, until I had mastered the business in detail and raised the plaster, still keeping the same old maxim in view, good stock and square dealing, which gave the business a steady, healthy growth. In 1895, realizing the necessity of help in managing my business, I took my son, E. A. Henby, as a partner, not a new man by any means as he had been virtually raised in the nursery, and under the firm name of J. K. Henby & Son we greet you, thanking you for your past and wishing to merit you future favors.

Our Specialties. We aim to add to our list a few of the most promising fruits each season and have the pleasure of offering several new varieties of special merit all thoroughly tested.

We call attention especially to the Crown Jewel gooseberry, the king of all gooseberries, the largest and most prolific gooseberry grown. We exhibited it at the Indiana Horticulture meeting and took first along-side the industry.

The Pomona Currant, the acme in the currant line.

Japan Plums, led by the Wickson. Don't fail to try it. It is a grand plum.

Nothing better than that large, plump bunch of Campbell's early grape that keeps as well as the winter sorts.

Elberta Peach. Don't miss it. It is a wonder. We pride ourselves in offering the above. We do not remember a time when so many promising fruits have been offered to the public as during the past few years.

It is not the least of our advantages that we are situated where the winters are severe and variable, thus hardening our trees and adapting them for any climate. We do not believe it is wise to buy stock grown in Southern or warm climate to transplant in colder sections, and right here our hardy stock comes in as the most suitable for the Northern and Western States and Canada. The truth is apparent to every thinking man.

Skillful Packing. We employ the best and most faithful help to do our packing, and this is always done in the most skillful manner known to the trade. We frequently ship hundreds of miles and they always arrive in safe condition.

Location. We are situated at Greenfield, 20 miles east of Indianapolis on the Pan Handle railroad, four miles from the Big Four system, five miles from the C., H. & D. railroad and fifteen miles from the Belt railroad at Indianapolis, where we can ship in any direction. Our shipping facilities are unexcelled.

Facilities. We urge upon the reader our many advantages. Our location and natural facilities, our packing houses, our complete system of water-works to sprinkle the trees and keep them thoroughly moist, our advantages over other nurserymen in having our nurseries, packing houses, office, residence and everything pertaining to the business in the midst of our nursery ground, which enable prompt and quick handling of stock, our perfect system of careful packing, prompt shipment and rapid transportation, our efficient force of men, our experimental orchards and vineyards, which protect the planter against unworthy novelties, and, last but not least, our superior stock, which is complete in every respect.

Cheap Trees. We often receive letters asking for prices and stating they have written several other nurserymen and intend to place their orders where they can buy cheapest. So just a few words about cheap trees. No experienced fruit grower will ever tell you to buy the cheapest trees. They will say get the best. The very trees to be had, a few cents extra per tree, to get the best, is often many dollars saved in the end. If you buy a scrub tree and put years of cultivation on it, you will only have a scrub tree in the end, loss and disappointment. Besides this, it is an untold pleasure to see a fine straight, trim and perfect tree, branching out, growing

thrifty and strong, and as you cultivate it you will rejoice and be glad, and the pleasure is worth the price. You cannot buy something for nothing. It isn't nature. The cheapest trees are often dangerous and expensive in the end.

Do you go to the cheapest doctor, or hire the cheapest lawyer, or take the cheapest clothes or buy the cheapest horse? Then neither should you buy the cheapest trees simply because they are cheap; better plant less and get the best, and what you do plant will bring results and satisfaction. Trees carefully dug and selected, throwing out all with poor roots, all that are crooked and stunted, and taking only the best and most thrifty, are well worth the prices we ask. We make two grades, both equally good—the heavy first-class and light first-class—and we burn the second class for culls.

Suitable Distances for Planting.

Apples.....	25-40 feet	Grapes.....	8 - 10 feet
Pears, standard.....	16-18 "	Currants, gooseberries.....	3 - 4 "
" Dwarf.....	10 "	Raspberries, red.....	3 - 4 "
Peaches.....	16-20 "	" black.....	4 - 5 "
Cherries, sweet.....	16-20 "	Blackberries.....	5 - 7 "
" sour.....	12-15 "	Strawberries, rows.....	1½ - 3½ "
Plums.....	16-20 "	" in beds.....	2 - 2 "
Quinces.....	10-12 "	Asparagus in rows.....	1 - 2 "

Number of Trees or Plants Per Acre.

4 feet apart each way.....	2723	15 feet apart each way.....	194
5 " " " ".....	1742	18 " " " ".....	135
6 " " " ".....	1210	20 " " " ".....	110
8 " " " ".....	680	25 " " " ".....	70
10 " " " ".....	430	30 " " " ".....	48
12 " " " ".....	302	33 " " " ".....	40

To ascertain the number of plants required to the acre at any given distance, divide the number of square feet (43,560) in an acre by the number of square feet you desire to devote to each plant. For instance: Strawberries planted $1\frac{1}{2} \times 3$ feet, each hill will occupy $4\frac{1}{2}$ square feet, making 9,680 plants per acre.

Provide For a Succession of Fruits, etc.

Judicious Planting. Plant for use in April and May, asparagus, rhubarb and fruits that will keep over winter, (for April and May use;) June, July and August, currants, plums, peaches, cherries, apricots, pears, raspberries, blackberries, apples and grapes; September, October and November, apples, grapes, peaches, plums, quinces, pears, nuts, and preserved fruits; December, January, February and March, pears, apples, nuts, grapes and preserved fruits.

Many farmers buy fruit to eat. And now we have to record a very sad fact. It is true many farmers are fruit buyers themselves.

Why do they deny themselves and their families the delights of a fruit garden, when for a small sum they can procure from us good healthy trees and plants that will thrive and succeed?

Directions For Planting.

Preparation of Ground. Before receipt of trees you will please prepare your ground for planting by plowing as deep as possible, subsoil if practicable. Dig the holes for the trees as per plan, making them at least three feet across and two spades deep, keeping the top and subsoil separate.

Care of Trees Before Planting. When you get your trees to where you wish to plant take them apart and heel in, by digging a trench deep enough to admit all the roots, and setting the trees therein as thick as they will stand, carefully packing the earth around the roots, taking up when required.

Planting. Take the trees from the trench, cut off all broken and bruised roots with a sharp knife, cut back the branches in proportion to the roots, fill the whole with surface soil so the tree will stand about as it did in the nursery after the earth has settled, except Dwarf Pear, which should be planted two or three inches deeper. Puddle well in a stiff clay puddle, especially small fruit plants: work the soil thoroughly among the roots and when well covered tramp firmly; set the tree firm as a post, but leave the surface filling light and loose. Never let the manure come in contact with the roots.

Currant and Gooseberries. Prune severely by cutting all suckers off and thin out all crowded branches and old wood, cultivate well, use well-rooted manure and leached ashes; don't be afraid of using too much.

Grape. Cut off all broken and bruised roots; spread roots out well and layer them about from four to six inches in the soil; mulch well.

Raspberry and Blackberry. Take a light spade and thrust it in the earth, lift out and set the plant in the hole, then cover with dirt, packing firmly with your foot.

Strawberry. Make the earth very fine and loose, planting in about the same manner as cabbage, being careful not to cover the crown.

Cultivation. The trees should be kept from grass and weeds; no crops should be grown except potatoes, beans, peas, carrots or corn; clover and other sown crops should be avoided. Cultivate well; drain well; no manure should come in contact with roots.

Treatment of Trees That Have Been Frozen in Packages or Received During Frosty Weather.

Place the package, unopened, in a cellar or some other place, cool, but free from frost, until perfectly thawed when they can be unpacked, and either planted or placed in a trench until convenient to plant. Treated thus, they are not injured by the freezing.

Trees Procured in the Fall for Spring Planting.

To insure success, select a dry spot where no water will stand during the winter, having no grass near to invite mice. Dig a trench deep enough to admit one layer of roots, and sloping enough to admit the trees to lay at an angle of not more than 30 degrees with the ground. Having placed one layer of roots in the trench cover them with mellow earth extending well upon the bodies and see that this is firmly packed. Then add another layer of trees overlapping the first and continue as at first until heeled in. As soon as this is done, cover the tops so well with evergreen boughs that they will be thoroughly protected from winds. Roses and other small stock may be wholly covered with earth.

FRUIT DEPARTMENT.

APPLES.

The first fruit, both in importance and general culture, is the apple. Its long life, hardiness and general productiveness of fruit, that, with care and selection, is in season all the year, makes it the staple fruit of the country, indispensable for family use.

If apples are planted at the rate of 49 trees to the acre, rows of peach, dwarf pear, etc., may be planted between the apples. After eight or ten years of productiveness, as the space is needed for the

apples, the other trees may be removed leaving the orchard better for the protection and at the same time having yielded the planter a large return for his outlay and labor.

Summer Apples.

✓ **August Red Streak** (new.) Originated by J. K. Henby & Son. This tree is probably a seedling of Dutchess of Oldenburg. It first attracted our attention as being an extremely early apple, good cooker, very large, extremely hardy and very prolific. Fruit large, oblong, striped on yellow background. Tree vigorous grower, with upright head requiring little or no trimming. Hardy, fruit juicy mild sub-acid. Excellent, July and August.



✓ **Benoni.** Medium roundish, pale yellow, shaded with crimson, juicy, tender, sub-acid—August.

✓ **Ea Harvest.** Medium size, round, straw color, tender, sub-acid and fine, productive—August.

✓ **Ea Trenton.** Large, red, roundish, excellent, productive—August.

✓ **Red Astrican.** Large, beautiful deep crimson, juicy, rich acid, good bearer—August.

✓ **Yellow Transparent Russian.** Very early, of good quality and decided merits—July.

Fall Apples.

✓ **Dutchess of Oldenburg, Russian.** Medium to large, skin yellow streaked with red, flesh juicy and good, with a rich sub-acid flavor, productive—September.

✓ **Flora Bell.** Medium, color red blush on deep yellow background, roundish, medium quality—September.

✓ **Maiden Blush.** Rather large, evenly shaded red cheek on a

clear, pale yellow ground, flesh white, tender, bears abundant crops—September to October.

Milam. Medium to large, striped with red, quality excellent, good cooker—September to October.

Rambo. Medium, yellowish streaked with dull red, mild, tender, good and productive—October to November.

Red Beitigheimer. Fruit large to very large, skin pale, cream-colored ground mostly covered with purplish crimson, flesh white, with a brisk pleasant flavor, one of the largest and most handsome apples—September.

Winter.

Aiken Red. First exhibited before Illinois Horticultural Society in 1890. Three entries were made, as best seedling apple, best new apple and best in quality. It was rewarded all three first premiums over all competitors, including both old and new varieties.

The original Aiken tree is 7 feet 3 inches in circumference, about 40 feet high and over 60 years old; a regular bearer, keeps until April or May, of great beauty and excellent quality, fine grained, crisp, spicy and mild. Its fine quality and beauty make it worthy of general trial, so beautifully colored as to be almost irresistible to the eye and of equally fine flavor. The Ideal winter apple is of good quality, medium size, red color, late keeper and tree productive.

Arkansas Black. Medium to large, fine flavor, beautiful dark color, almost black; one of the best cooking apples—January and August.

Baldwin. Large, roundish, deep bright red, sub-acid, good flavor, very productive—November and December.

Clayton. Flesh yellow, breaking, sub-acid, very good for both kitchen and market—January to March.

Grimes Golden. An apple of highest quality, medium to large size, yellow, tree hardy, vigorous and productive, one of the very best—November and January.

Mann. Fruit medium to large, roundish, oblate, skin deep, yellow, juicy, mild, pleasant, sub-acid, good, an abundant bearer, tree large—May to June.

Paradise Winter Sweet. Large, excellent.

Pewaukee. Medium to large, red streaked on yellow back ground, hardy, quality excellent—December to January.

Rhode Island Greening. Large, yellowish, green, tender, juicy, with rather an acid flavor, abundant bearer—November to December.

Rome Beauty. Large, yellow striped with red, flesh juicy, crisp, excellent—October to December.

✓ **Stark.** Fruit large, roundish, shaded and striped with light and dark red on yellow background, whole surface sprinkled with light brown dots—December to February.

✓ **Talman Sweeting.** Medium, pale yellow, firm, rich and very sweet, valuable for preserving and baking—October to December.

✓ **Vandaver Pippin.** Medium, yellow ground, flesh light yellow, rich, good grower and early bearer—November.

✓ **Wagner.** Medium to large, deep red in the sun, excellent, very productive, bears young—December to May.

✓ **Wealthy.** Medium to large, red streaked with white, quality good, hardy, one of our best apples—December to February.

✓ **White Pippin.** Large, roundish, an annual bearer of handsome and good fruit—December to March.

✓ **Wine Sap.** Medium, dark red, excellent, an abundant bearer—November to April.

✓ **Wolf River.** Very large and handsome, extremely hardy, good bearer—November to December.

✓ **Yellow Bellflower.** Large, tender, juicy, good—November to April.

Crab.

✓ **Whitney.** Large, skin smooth, glossy green, ripens late in August, tree a great bearer and very hardy—October.

✓ **General Grant.** Tree a vigorous and upright grower, fruit large, round, red to very dark red, excellent for desert—October.

PEARS.

We would look with surprise at the person who could not find a great amount of pleasure in the cultivation of this noble fruit. The pear is indeed the royal family in the kingdom fruits. Pears can be grown as cheaply as apples if the right sorts are selected; selling at a much higher price than the apples, consequent upon the great demand by our city customers. The pear will adapt itself to a great variety of soils, although it thrives best on a rather deep, strong loam, with a dry, well drained subsoil.

Ripen the fruit in the house as follows: Gather summer at least ten days before they are ripe; autumn pears at least a fortnight, and let winter varieties hang until the leaves begin to fall.

Summer Varieties.

Bar-Seckle. This fine pear originated with Jacob Moore, of New York, well known in the horticultural world as the originator of several worthy fruits. The name will be better understood when we say that this was no chance seedling, but one gained by crossing the two old well-known varieties, Bartlett and Seckle, hence the name Bartlett-Seckel. Such a union it is needless to say is hailed with delight by all fruit-loving people. It is good size, buttery flesh, thrifty growth, and the great productiveness of the Bartlett, with the rich, sweet, aromatic flavor and extra fine quality of the Seckle combined in one tree, it ripens a little later than the Bartlett.



GARBER PEAR.

Bartlett. Too well known to need description.

Clapp's Favorite. Very large, yellowish green, full yellow when ripe, marbled with dull red in the sun, covered with small dots, juicy, melting and fine, an abundant bearer—season August.

Wilder. One of the earliest, a good keeper and shipper, tree vigorous, bears young and abundant, extremely hardy, surface smooth, pale yellow ground with dense shading of brownish carmine, flesh whitish yellow, fine grained, tender, flavor sub-acid, sprightly—ripens August 1.

Autumn.

Dutchess D'Angouleme. Very large, dull greenish yellow, streaked and spotted with russet, flesh white, buttery and very juicy, with a rich and very excellent flavor—October and November.

Flemish Beauty. Large, beautiful, juicy, melting, rich and fine, good bearer, hardy everywhere, dwarf and standard—September and October.

Garber's Hybrid. Tree very vigorous, healthy and productive; fruit medium to large, pyriform, light yellow with a distinct quince-like flavor valuable for canning—September.

Kieffer. Raised from seed of the Chinese sand pear accidentally crossed with the Bartlett. Tree has large, dark green, glossy leaves, and is of itself very ornamental; is an early and very prolific leaver. The fruit is of good quality, showy for table or market. It never rots at the core, and is as nearly blight proof as is possible for any pear to be. Dwarf and standard—October to December.

Louise Bonne De Jersey. Rather large, greenish yellow, with a bright red cheek; juicy, buttery and melting, excellent, very productive. Dwarf and standard—September to October.

Winter.

Lawrence. Rather large, yellow, covered with brown dots; flesh whitish, somewhat buttery, with a rich, aromatic flavor, unsurpassed among the early winter pears. Should be in every orchard. Standard—November to December.

Vicar of Wakefield. Large, long, desirable for its productive-ness. Best on quince—November to January.

Winter Nelis. Medium size, yellowish green and russet, fine grained, melting, rich and delicious, one of the best winter pears, very productive. Standard—December.

PEACHES.

To secure healthy, vigorous and fruitful trees and fine fruit, the following points must be well attended to in peach culture: 1st. Keep the ground clean and mellow around the trees, and give it an occasional dressing of wood ashes; 2nd, keep the heads low, the

trunks ought not to exceed three feet in height; 3rd, attend regularly every spring to pruning and shortening the shoots of the previous year's growth. This keeps the head round, full and well furnished with bearing wood. Cut the weak shoots one-half and the strong ones one-third; but see that you have a sufficient supply of fruit buds. Sickly and superfluous shoots should be cut clean out.

It should be borne in mind that the fruit is produced on last season's growth, and hence the necessity of keeping up a good supply of vigorous annual shoots all over the tree. In planting peaches it is of the highest importance to cut back severely.

Fitzgerald, of Crawford Type. A seedling found at Oakville, Ont., where it stands the winter perfectly and for the past five years has cropped regularly. Oakville is situated outside of the peach growing district, and any other varieties will not succeed there. It is undoubtedly very hardy, and the fruit averages larger than any other variety known. Quality first-class, Freestone, and we recommend it with entire satisfaction.

Amsden. Very early, excellent keeper and shipper, flesh white, with a delicious flavor, one of our best peaches—July.

Crawford's Early. Best of yellow peaches for market, wonderfully productive and hardy—last of August.

Crawford's Late. Fruit of largest size, productive, one of the best late sorts—last of September.

Elberta. Freestone, large, ripens last of July and early August; receives nothing but praise wherever grown. Commercial orchardists are now planting more Elberta than anything else.

Crosbey. (Called Crosbey Frost Proof,) very hardy, low spreading willowy growth; fruit, rich orange, yellow with carmine or sunny side, a perfect freestone, valuable.

New Prolific. A fine large variety, ripening after Crawford, tree a very strong grower, hardy and productive—September.

Champion. By many placed at the head of the list for size, quality and hardness, skin creamy white with red cheek, sweet, rich and juicy, perfect freestone—August.

Triumph. A wonderful new peach, ripens with Alexander, blooms late, has large flowers and is a sure and standard bearer; fruit large with a very small pit, surface yellow, nearly covered with red and dark crimson in the sun; flesh bright yellow. \$1,200 was paid for the original stock of this variety.

Mountain Rose. Large, red, flesh white, juicy, rich and excellent. One of the best of early peaches, should be in every collection—first of August.

Globe. Large, flesh firm, juicy, yellow, quality good, pleasant, rich, delicious—October.

PLUMS.

Soil. In none of the fruits grown in the north has there been shown a more growing interest in recent years than in the culture of plums. Lowish land will produce this fruit, but it must be well drained; plums do not like wet feet. A soil inclined to clay, be it upland or lowland, is the plum's natural location.



In order to succeed well with the plum, they should be planted in clusters as per cut, mixing the varieties, alternate rows 16 or 20 feet apart. In this way they pollenize each other, which is necessary, as they are distinctly male and female.

Select List.

✓ **Bradshaw.** Fruit very large, dark violet red; flesh yellowish green, juicy and pleasant, productive, resembles Niagria—August.

✓ **Burbank.** Fruit nearly globular, clear, cherry red, lilac bloom,

flesh yellow, firm, meaty, rich and sugary: usually begins to bear second year after transplanting, very productive—August.

German Prune. Large, oval, purple or blue, juicy, rich, fine—September.

Lombard. Medium round, oval, violet red, juicy, pleasant and good; a valuable market variety is inclined to rot on the tree when not sprayed—August.

Moore's Arctic. Originated in Maine, celebrated for its remarkable hardiness, dark purple, fine flavor, great bearer, a long keeper—September.



Hale. Fruit large, bright orange, mottled with cherry red, superb in quality, none so fine for the family, ripens middle of September. Its season of ripening, great size and beauty will make it the most profitable of all plums in the market.

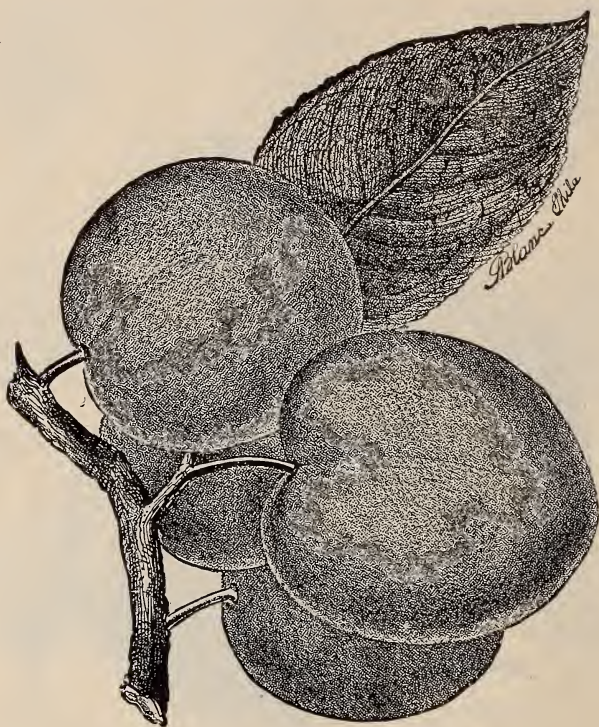
Luther Burbank says of it: "No one who ever tested the fruit when ripe will ever say any European plum is superior to the Hale."

Pond's Seedling. Fruit light red changing to violet, flesh rather coarse, abundant bearer, one of the most attractive in cultivation—September.

Robison. One of the most prolific market varieties, very vigorous and productive, skin yellow nearly covered with light red, showy, ripens early.

Shipper's Pride. A large blue plum; very hardy and productive and possessing remarkable market qualities—September.

Shropshire Damson. A plum of fine quality, remarkably free from curculio, blue, flesh amber color, juicy and sprightly—September.



Wickson. Originated by Mr. Burbank, who says: "Among the many plums I have fruited this stands pre-eminent in its rare combination of good qualities." Fruit remarkably handsome, deep maroon red covered with white bloom, stone small, flesh fine, texture firm, sugary and delicious, excellent keeper and shipper.

Wolf. Nearly as large as Lombard and a perfect Freestone, superior for cooking, hardy and popular—August.

Wild Goose. Fruit medium, purple with blue bloom, flesh juicy and sweet, good, productive—July.

CHERRIES.

There are few more desirable trees than the cherry. It may be planted near the street, or used in line avenues as an ornament, and it will at the same time produce an abundance of fruit. The trees thrive in a well drained location.

The cherry may be grown for market with great profit. Many varieties are regular and abundant bearers, and the fruit commands a good price in the market.

Select Varieties.

✓ **Dye House.** This cherry compared with the Early Richmond is one week earlier ripening, and better quality, good bearer and is as hardy as that popular sort, medium to large, dark red, rich and pleasant when ripe, desirable for the west and north-west.

✓ **Early Richmond.** Medium, dark red, juicy, sprightly, acid flavor, one of the best acid cherries and unsurpassed for cooking purposes, very productive.

✓ **Olivet.** Of French origin, large globular, very shining deep red sort; flesh red, tender, rich and vigorous, very sweet, sub-acid flavor—June.

✓ **Large Montmorency.** A large, red, acid cherry, larger than Early Richmond, and ten days later, hardy and very productive, excellent.

✓ **Late Duke.** Large, rich, dark red when ripe, flesh pale amber, sub-acid, fine, late.

✓ **Louis Philippe.** Large, roundish regular, color rich, dark and almost purplish black, flesh red, tender, sprightly, mild acid, good—July.

QUINCES.

If your bushes are not productive it is on account of lack of cultivation and fertilization, which is very necessary.

Uses. Highly esteemed for communicating additional flavor and piquancy to preserves and cookery known to good matrons.

Soil Culture. The trees or bushes should have a good, rich soil, clean cultivation and an annual dressing of well rotted manure. Thinning out the twigs so as to keep the head open to the sun and air, and removing dead or decaying branches, is all the pruning necessary to secure good and abundant fruit.

Select Quinces.

✓ **Missouri Mammoth.** The largest quince in cultivation, large size, perfect shape, very rich and aromatic; tree vigorous, productive, an early bearer, and free from blight and other diseases so common to quinces.

Meeches' Prolific. Large, bright yellow, vigorous and wonderfully productive.

Champion. Large, yellow, showy and handsome; ripens two weeks later than Orange.

Angers. Later than Orange, not so large, cooks well; tree stronger grower and hardier.

APRICOT.

A delicious fruit of the plum species, valuable for its earliness. It is liable to be attacked by the curculio, and requires the same treatment as the plum. It bears immense crops; ripens in July and August.

Select Russian Sorts.

Alexander. Very hardy, an immense bearer, fruit large, yellow, flecked with red, very beautiful, sweet and delicious—July.

Prunus Simoni (apricot plum). Wood resembles peach; in odor and flavor it comes near nectarine; fine, peculiar aromatic flavor; flesh fine, yellow, firm, a brick red color, thicker than long, deep cavity at each end; claimed to be free from curculio; should be in every collection.

GRAPES.

The culture of the grape within the last few years has attracted a great deal of attention throughout the United States. Many vineyards of large extent have been and are still being planted in various parts of the country, and are a great pecuniary success.

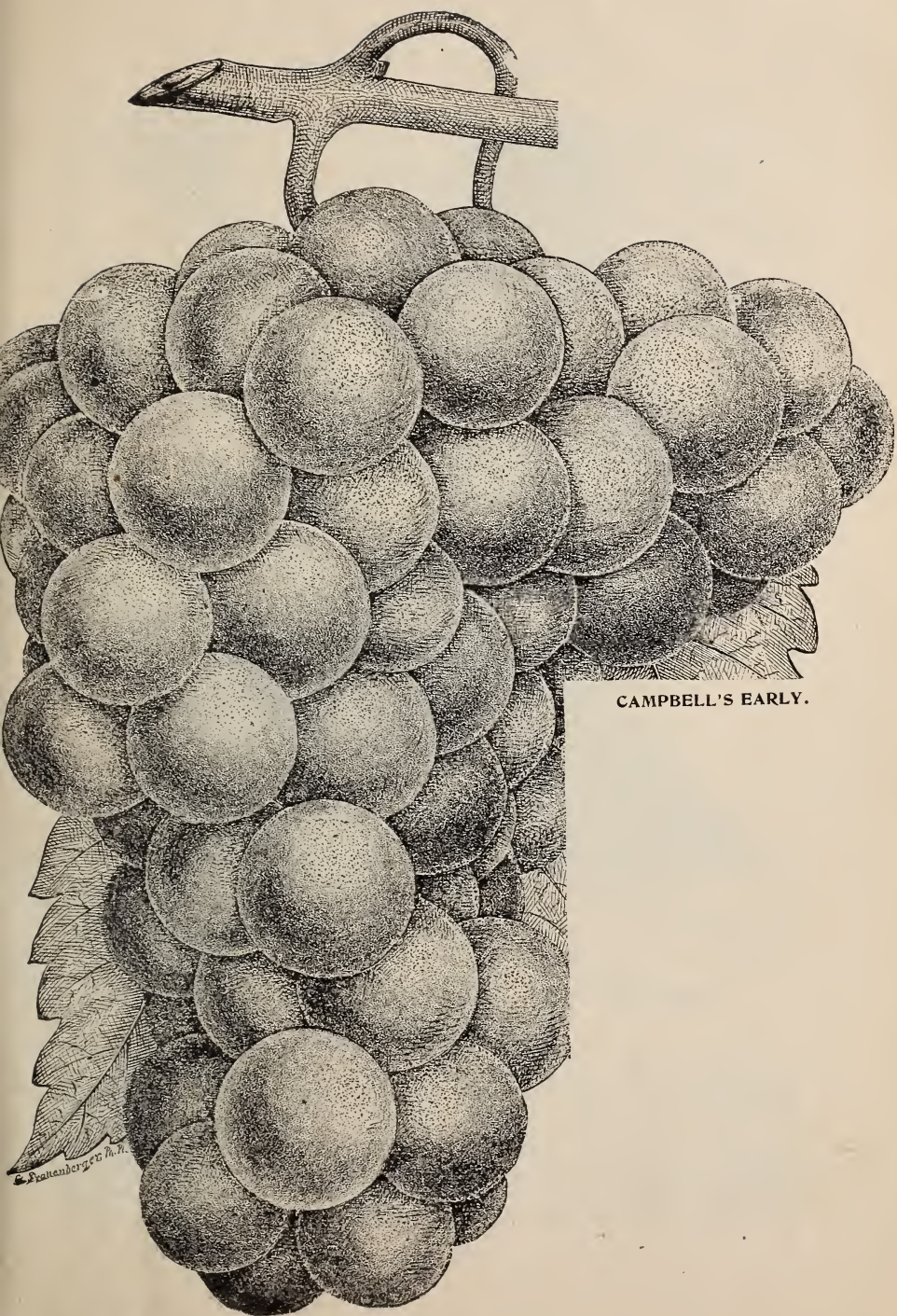
Selected Varieties.

Campbell's Early. This grape is now offered to the public with entire confidence that it will be found a truly valuable acquisition to our list of good, native American varieties, and believe that its introduction will mark an epoch in the advancement of American grape culture. It is now believed to be a grape in all respects better adapted to general use in all sections suited to our native varieties than any other which has yet been grown and tested.

It is a very strong, vigorous, hardy vine, with thick, heavy mildew resisting foliage, always setting its fruit well and bearing abundantly; fruit clusters very large, compact and handsome, skin thin, but very tenacious, bearing handling and shipping, remarkable keeper, season very early, showing color late in July. Do not fail to plant this. Color jet black.

Brighton. Bunches large and loose, berries large; requires favorable soil and situation; red.

Concord. Most popular variety, universally healthy, vigorous and productive, flesh somewhat buttery, juicy and sweet; black.



CAMPBELL'S EARLY.

✓ **Delaware.** Bunches small and very compact, skin thin, flesh very juicy, without any hard pulp, sweet, spicy and delicious; red.

✓ **Moore's Diamond.** Vine vigorous, berry size of Concord, rich, sprightly, sweet, early; white.

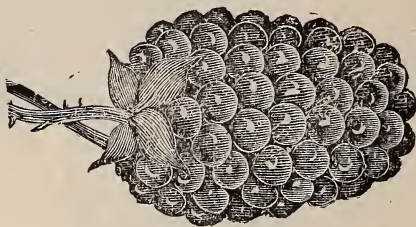
✓ **Moore's Early.** Resembles Concord, except it is ten days earlier; black.

✓ **Niagara.** The most popular white grape, strong grower, bunches large, quality good, very little pulp, juicy and sweet; white.

✓ **Pocklington.** Showy, good quality, vine very hardy and productive, seedling of the Concord, juicy and sweet to the center, excellent; white.

✓ **Worden.** A seedling of the Concord, which it greatly resembles in appearance and flavor, but the berries are larger and better flavor; several days earlier than Concord; black.

DEWBERRY, OR RUNNING BLACKBERRY.



✓ **Leucetia.** The plants are perfectly hardy and healthy, and remarkably productive. The fruit is often one and a half inches in diameter, sweet and luscious throughout, without any hard center or core. As the dewberry roots only from the tips, and does not sprout like blackberries, this will be more desirable for garden culture, and the trailing habit will render winter protection more easily accomplished in cold climates, where the precaution may be necessary.

IMPROVED DWARF JUNE BERRY.

The juneberry is one of the most valuable berries. The wood is hard and firm, and endures the extremes of climate without injury. Its leaves are dark and glossy green. The flowers appear about the same time as the apple. The fruit is bourn in clusters, like the currant, and ripen in June. Its size equals the wild gooseberry, shape round, color reddish purple at first, and becomes a blueish black when fully ripe. Its flavor approaches the huckleberry, a mild, very rich sub-acid; needs no special treatment.



IMPROVED DWARF JUNE BERRY.

STRAWBERRIES.

First of the small fruits comes the beautiful, wholesome and appetizing strawberry. The profits which results from its cultivation, when properly conducted, are enough to satisfy the highest expectations.

The blossoms of all varieties are bi-sexual or perfect. Those marked imperfect are destitute of stamens and are termed pistillate.

Imperfect varieties should have a row of perfect flowered sorts

planted every third or fourth row at least to pollenize their blossoms. When the imperfect bloomers are properly fertilized they are the most prolific, and there is no reason for any prejudice against them.

Select Varieties.

Bubah, Imp. Fruit large and handsome, roundish conical, bright scarlet, moderately firm; plant a strong grower, with large foliage, and very productive, a most desirable berry for home use and near by market.

Clyde, Perf. This is the up-to-date berry for earliness, productiveness and quality. It makes friends wherever planted; one of the most popular varieties where it has been grown: but few do better: as large as Bubah, and earlier and much firmer. The plant is very vigorous and healthy, foliage light green and berries scarlet. J. H. Hale said at his home in June that the Clyde was the best berry in America. It is the great business, money maker, debt destroyer, basket filler and family provider.

Crescent Seedling, Imp. Medium conical, bright scarlet, very uniform in size, beautiful, very productive, and continues to ripen till late in the season. It appears alike at home in all soils.

Cumberland, Perf. A magnificent variety, berries immense, fine, perfect form and fine flavor, plant vigorous and productive.

Haverland, Imp. Large, long, light red, very vigorous and healthy, great yielder.

Warfield, Imp. Medium to large, dark red, flesh bright red, quality fine, ripens with Crescent, productive.

Marshall, Perf. Very large, roundish, dark rich crimson, quality very good, firm; plant productive season medium to late.

Greenville, Imp. It leads in productiveness, market, home use and general purpose, combines earliness, firmness and large size, very even and fine color, with wonderful vigor and health of plant.

Parker's Earle, Perf. Good size, good quality, quite firm, enormously productive, one of the very best for hill culture.

Michael's Early, Perf. Medium, earliest of all. In order to attain perfection it must be kept well thinned out.

Brunette. Medium to large, abundant bearer, color deep red through, uniform size and very distinct from any other in color and flavor and is quite firm, plant a strong grower. Fruit sells from 3 to 5 cents per quart more than either Bubah or Haverland on account of its superior quality.

Prof. J. Troop, of Indiana Experiment Station, where Brunette has been on trial for three years, places it at the head of all varieties at the station for delicious flavor.



GREENVILLE STRAWBERRY.

RASPBERRIES

Will do well on any soil that will produce a good corn crop. Land should be thoroughly prepared and well enriched. As soon as they are done bearing cut out the old wood to give more vigor to the young canes. Plant in rows 5 feet apart and 3 feet apart in rows.

Louden. A new variety, originating with the veteran horticulturist, F. W. Loudon, of Wisconsin. Vigorous growth, large fruit, beautiful rich dark crimson color, good quality, and marvelous productiveness and hardiness, enduring winters without protection and without injury to the very tips. It promises to stand at the head of the red market sorts.



✓ **Shaffer's Colossal.** An immense raspberry, both in cane and fruit. Does not sucker like other red varieties, but propagates from the tips like Black Caps. Hardy and enormously productive, berries are very large, of a dull purplish color, luscious and rich, sprightly flavor. It is unrivaled for family use.

✓ **Golden Queen.** Large, quality unequalled. The desire for a yellow raspberry of high quality, combined with vigorous growth and perfect hardiness, is believed to be fully met in this berry.



Black Caps.

✓ **Eureka.** Large as Gregg, early as Palmer, better quality than either, very productive, strong, upright grower, very hardy.

Neamaha. The best late variety, larger, stands drouth better,

hardier, and does not die out so bad as Gregg, hence we have discarded the Gregg and planted it exclusively for our late berry.

Palmer. Ripens at the same time as Tylor or Souhegan, larger, good quality, wonderfully prolific, often bending the canes to the ground with the weight of fruit.

Ada. An excellent early variety, very productive, good.

CURRENT.

It is surprising to what extent the culture of the currant has been neglected throughout the country generally, yet in the currant we have one of the most profitable fruits in cultivation.

No tree or plant is easier to transplant or surer to grow. It comes into bearing soon after planting. It requires less work than almost any other fruit. Can be planted in the orchard, as it likes partial shade. None of the small fruits will remain on the bushes so long without injury.

Select Varieties.

Pomona. This wonderful currant was introduced to the public in 1897. It possesses a record unequalled by any other currant. It is a most vigorous grower, perfectly healthy and hardy, sweetest and best in quality, making a very choice desert fruit to eat as strawberries with sugar and cream, is good size, retains its foliage until fruit is all gathered, thus preventing sun scalding, will hang on bush longer than any other sort; is more easily picked and keeps longer; it brings more dollars to the acre than any other sort. In 1893 $6\frac{1}{2}$ acres sold at wholesale for \$4,076. In 1892 $6\frac{1}{2}$ acres sold for over \$3,400, with the plants only at an average of 3 1-5 years old.

Chery. Very large, deep red, fine for preserving and a valuable market variety.

Pay's Prolific. A new currant which well sustained the claims of its disseminator. It is as large as the Chery, has less acid and is very prolific.

Red Dutch. An old well known variety that is still valuable.

White Grape. Very large, yellowish white, sweet or very mild acid, excellent quality and valuable for the table, the finest of the white sorts, very productive.



GOOSEBERRY.

The gooseberry is as hardy and profitable and requires the same cultivation as the currant. We pick gooseberries by stripping them,

**CROWN JEWEL GOOSEBERRY.**

leaves and all, from the bushes, with the aid of good, strong gloves, then running them through a fan mill, the same as beans. Thus harvesting is inexpensive, and being picked in a green state, they can be handled as easily and safely as potatoes.

Crown Jewel. This gooseberry originated with W. & J. Ashworth, of Tippecanoe City, O., and has been fruited for the past four or five years, each year giving a full crop of handsome berries, more productive and two and a half to three times as large as the Downing. It is undoubtedly the largest and most prolific American variety grown. In the spring of 1894 we traded the originators three Pomona currants for three Crown Jewels, and in 1896 they bore a full crop of fine, large berries. We exhibited at the Indiana State Horticultural meeting in the summer of 1897, and easily carried off first premium, exhibited by the side of Industry. We feel confident in saying this is destined to lead all others, for both home use and profit.

Industry. Vigorous, upright growth, a large cropper, very large and handsome. If left to attain maturity, it is a dark red color, hairy, with a pleasant, rich flavor.

Downing. Fruit large, roundish, light green, with distinct veins, skin smooth, flesh rather soft, juicy and very good, large, vigorous and productive.

Hooten Seedling. A medium sized variety, which bears abundant and regular crops, and never mildews, fruit smooth, red, tender and very good, very valuable.

BLACKBERRY.

Plant on good land, moderately matured, rows seven feet apart three feet in a row, for field culture; cultivate shallow.

SELECT VARIETIES.

Ancient Britan. Fruit large, showy, hardy as the Snyder, much earlier and larger, very prolific, a profitable market berry.

In the season of 1897 we picked seven bushels from one picking off of a row of about 500 yards long. We consider this the most valuable market berry.

Snyder. Extremely hardy, enormously productive, medium size, very popular.

Taylor. One of the largest blackberries grown, fruit of best quality, melting and without core, very productive and hardy.





✓ **Wilson, Jr.** A seedling of Wilson's Early, ripening a week earlier than that variety, fruit of largest size, bush vigorous and healthy.

✓ **Early Harvest.** Exceedingly early and always reliable, an enormous bearer, berries sweet and of the highest quality.

RUSSIAN MULBERRY.

The Russian Mulberry is very ornamental in garden or lawn,

but is worthy of cultivation for its fruit alone. Is a rapid growing tree, bears fruit at 2 or 3 three years of age and every year. Valuable.

ASPARAGUS.

To make a good asparagus bed, the plants may be set in the fall or early spring. Prepare a piece of fine loamy soil, to which has been added a liberal dressing of good manure. For a garden set in rows 18 to 24 inches apart and 10 to 12 inches in a row. The crowns should be covered three inches below the surface of the ground. If set in the fall they should have a heavy covering of fine stable manure and forked in early in the spring.

Select Varieties.

✓ **Barr's Mammoth.** A very desirable sort, tender, large stalks, of fine quality, excellent.

Conover's Colossal. The good, old variety, well known everywhere, of large size, rapid growth and good quality.



ORNAMENTAL DEPARTMENT.

DECIDUOUS TREES.

Catalpa.

Speciosa. A variety originating in the west, more upright and symmetrical in its growth than the common catalpa, and blossoms two or three weeks earlier; very valuable for timber, fence posts, railroad ties, etc., possessing wonderful durability; very ornamental and valuable tree, large, luxuriant flowers, bell-shaped, white, with purple dotted center.

Teas Hybrid. Has large, luxuriant foliage and large white flowers, with purplish dots and a touch of yellow around the throat, which have a pleasant, delicate fragrance, and a tree in bloom not only presents a magnificent spectacle to the eye, but also fills the air for quite a distance with its agreeable odors.

Chestnut.

American Sweet. Among our large collection of ornamental native forest trees the chestnut is unrivaled for its beauty. The foliage is rich, glossy and healthy, and the whole tree is covered in early summer with long, pendant, tassel-like blossoms, than which there is none more graceful and beautiful. It is especially desirable for its nuts, which it bears profusely a few years after transplanting.

Horse Chestnut. A very beautiful well known tree, with round dense head, dark green foliage and an abundance of showy flowers in early spring. More hardy than the American Sweet.

Linden.

American or Basswood. A rapid growing, beautiful native tree, with very large leaves and fragrant flowers.

European. A pyramidal tree, with large leaves and fragrant flowers.

Magnolia. A noble, beautiful tree, with very large leaves and fragrant bell-shaped flowers.

Maple.

Norway. A distinct foreign variety, with large, broad leaves of a deep rich green. Probably the best maple in cultivation.

Silver-Leaved. Of excellent rapid growth and desirable for immediate effect.

Sugar or Rock. A very popular tree, and for its stately form and fine foliage justly ranked among the best, both for lawn and avenue.

Mountain Ash.

European. A fine hardy tree, head dense and regular, covered from July till winter with large clusters of bright scarlet berries.

Poplar.

Carolina. A vigorous, healthy native tree of rapid growth, pyramidal in form, with large glossy leaves; valuable for park and street planting, where a quick shade is wanted. It is free from attacks of insects, and will endure the coal smoke and gas of cities; does not sucker.

Volga. One of the best trees for street and park, grayish green bark, fine pyramidal head, not spreading out too much or growing too slender, leaves forming earlier in the spring and hanging on longer in the fall than the Carolina; foliage dense, giving abundant shade, perfectly hardy and does not sucker.

Balm of Gilead. Fine, symmetrical, spreading head, rapid growing tree worthy of a place in any park or lawn; also valuable for the healing salve extracted from the buds.

WEeping DECIDUOUS TREES.

Birch.

Cut Leaved Weeping. An elegant, erect tree, with slender, drooping branches and fine leaves; a magnificent variety, and worthy of a place in every lawn.

Mulberry.



Teas Weeping. A thrifty, vigorous grower, perfectly hardy, forming a natural umbrella-shaped top or head, foliage handsome, valuable.

Willow.

Kilmarnock Weeping. An exceedingly graceful tree, with a perfect umbrella head, large glossy leaves, one of the finest of this class of trees, and perfectly hardy.

EVERGREENS.

Arborvitæ.

American. This plant is, all things considered, the finest evergreen; valuable for hedges. It grows rapidly, and, with little care, soon forms a most beautiful hedge, very dense and perfectly impervious to the sight; is desirable to plant as an ornamental screen to divide lawn from other parts of the ground, or for other purpose.

Pyramidalis. The most beautiful of all the arborvitæ, having a dark green, compact foliage and remarkably erect form; perfectly hardy.

Fir.

Balsam, or American Silver. A very regular, symmetrical tree, assuming the conical form even when young; leaves dark green above, silvery beneath.

Pungen's Colorado Blue Spruce. One of the hardiest and most beautiful of all spruces, in form and habit similar to the white spruce; foliage of a rich blue or sage color; attracts the eye at a long distance; an important acquisition.

Juniper.

Irish. Very erect and tapering in its growth, forming a column of deep green foliage; a pretty little tree or shrub; hardy and a general favorite.

Virginian, Red Cedar. A well known American tree, with deep green foliage; makes a fine ornamental hedge plant.

Pine.

Austrian. A remarkably robust, hardy, spreading tree; leaves long, stiff and dark green; rapid growth; valuable for this country.

Scotch. A fine, robust, rapid growing tree, with stout, erect shoots and silvery green foliage.

White. The most ornamental of all our native pines; foliage light, delicate or silvery green; flourishes in the poorest soil.

Spruce.

Norway. A lofty, elegant tree, of perfect pyramidal habit, remarkably elegant and rich, and, as it gets age, has fine, graceful,

pendulous branches; very popular, and deservedly so; one of the best evergreens for hedges.

American White. A tall tree, with loose, spreading branches and light green foliage.

DECIDUOUS SHRUBS.

Althea, or Rose of Sharon.

These are fine shrubs, and especially valuable because of their flowering late in the fall, when all other shrubs are out of bloom. Entirely hardy and easy of cultivation.

Double Variegated. Fine double flowering, variegated pink and white.

Double Red. Double red flowers, variegated leaved.

Double Purple. Very showy, distinct, flowers double purple; exceptionally fine.

Calycanthus, or Sweet Shrub, or Alspice.

Floridus. An excellent shrub, having a rare and peculiar fragrance of wood and flowers. Its blooms are abundant and of a peculiar chocolate color.

Deutzia.

Candidissima. One of the finest shrubs, producing snow white flowers of great beauty; valuable for bouquets and baskets.

Honey Suckle, Upright.

Red Tartarian. A well known shrub; flowers bright pink, which appear in May.

Hydrangea.

Panaculata Grandiflora. The most popular shrub of the day; perfectly hardy, flowers immensely large, panicles creamy when first opened, changing to a pure white when fully out, and turning to a pink or bronze with age; commence flowering in July, and remains in flower until November.



HYDRANGEA.

Quince Japan.

Scarlet. An old and esteemed variety, having a profusion of bright scarlet flowers in early spring, and one of the best early shrubs we have; makes a beautiful and useful hedge.

Spirea.

The spireas are elegant, low shrubs, of the easiest culture, and their early blooming make them desirable.

Van Houtti. One of the most charming and beautiful of spireas, having pure white flowers, in clusters or panicles, about an inch in diameter, very profuse; there is no more desirable shrub in cultivation.

Billardii. Rose color; blooms nearly all summer.

Wiegelia.

Variegated leaved; leaves bordered with yellowish white; finely marked flowers; light pink.

CLIMBING SHRUBS.

Bignonia, or Trumpet Flower.

Scarlet. A splendid climber, vigorous and hardy, with clusters of large trumpet-shaped flowers in August.

Honey Suckle.

Common Woodbine. A strong, rapid grower; flowers very showy; red outside and buff within; June and July.

Chinese Twining. Holds its foliage nearly all winter; blooms in July and September; is very sweet.

Wistaria.

Chinese. A most beautiful climber, of rapid growth, and producing long, pendulous clusters of pale blue flowers; very hardy; double purple; double deeper in color than the single, and racemes of remarkable length.

American White. A native seedling, pure white, bunches short; a free bloomer.

Virginia Creeper (*Ampelopsis*.)

A native vine, of rapid growth, large, luxuriant foliage; the blossoms are succeeded by bright red berries; the vine is most calculated to take the place of the English Ivy, and is really in summer not inferior to it.

Clematis.

A beautiful class of hardy climbers, many of the varieties with flowers five to seven inches in diameter; excellent for pillars and trellises, or when used for bedding or running over rock work or an old tree or stump they make an excellent show. They delight in a sunny situation, and are perfectly hardy. A blending of colors, red, white and blue, produce a most pleasant effect.

Select Varieties.

Enchantress. Large, double white flowers, flushed in center with red.

John Gould Veitch. Double, very large bright clear blue.

Gipsy Queen. Rich, bright dark velvety purple; very free late flowering.

Henrii. Flowers large and finely formed, robust habit, creamy white.

Jackmanii. The most popular variety of clematis, large sized, intense violet purple flowers, richly veined and shaded with redish purple.

ROSES.

Hybrid Perpetual.

Hybrid Perpetual, or Hybrid Remontant, are perfectly hardy, free and constant bloomers, of all shades and colors.

To obtain the most satisfactory results they should be planted in deep, rich, well-drained soil, and severely pruned in early spring, before buds start.

Selected Varieties.

American Beauty. Hardy and of largest size, deep brilliant pink, shaded toward center with rich carmine crimson; the most popular of all roses.

General Jacqueminot. Brilliant crimson, large and extremely effective; fragrant and of excellent, hardy habit.

Marshall P. Wilder. Cherry carmine; fine.

Magna Charta. Pink, suffused with carmine.

Mabel Morrison. Flesh white; in autumn tinged with rose; the best white H. P. Rose.

Moss Roses.

Salet. Light rose color, large, full, pretty in bud.

Perpetual White. Pure white, borne in large clusters, fragrant.

Crested. Free, deep pink colored buds, surrounded by mossy fringe; very beautiful.

Climbing Roses.

Crimson Rambler. Vigorous, strong, rapid growth, abundant clusters, bright crimson.

Yellow Rambler. A decided yellow, moderate size, sweetly scented, very vigorous and hardy.

Seven Sisters. Crimson, changes to blush; large.

Baltimore Belle. White, with blush in center of the flower; strong and hardy.

Prairie Queen. Bright rose, very large, and fine bloomer.

SPRAYING.

Experience has demonstrated the fact that Spraying at the proper time and properly done for the protection against destructive insects, rot, fungus and blight is the best if not the only sure remedy against these enemies of the horticulturalist, and that it has succeeded and will succeed is evidenced by the rapidly increasing interest manifested in the manufacture, sale and use of spraying machines, and the good results obtained by those who have practiced this mode of protection.

WHEN TO SPRAY.

Apple Trees. For prevention of leaf blight spray as soon as the leaves are full grown with Bordeaux mixture or ammoniacal carbonate of copper. To destroy the aphid or plant lice, spray with kerosene emulsion as soon as the pests appear. To destroy the codling moth, canker worm and curculio, spray with Paris green or London purple, $\frac{1}{4}$ pound in 40 or 50 gallons of water, soon after the blossoms fall, and again in two weeks later. To destroy the web worm, spray with London purple or kerosene emulsion about August 1st to 10th, or as soon as they appear. This application should be made during the middle of the day, when the worms are out of their webs and feeding on the leaves.

Cherries. Treatment same as recommended for the apple.

Pears. The pear slug can easily be destroyed by spraying with Paris green, four ounces to 50 gallons of water, or kerosene emulsion, as soon as it begins operations. Pear and quince blight can be destroyed by spraying with

Bordeaux mixture. The codling moth and curculio should be treated same as recommended for apple trees.

Plums. Destroy the aphid with kerosene emulsion and a fine spray nozzle. The curculio can be destroyed by spraying with 3 oz. Paris green to 40 gallons of water. First application should be made as soon as blossoms have fallen, and repeated at intervals of a week or ten days. Four applications should be sufficient. Other enemies of the plum will be destroyed by this method, but in all cases be particular to keep the poison and water constantly stirred.

Peaches. If attacked by the black peach aphid, spray with kerosene emulsion. The plum curculio frequently attack the peach, in which case spray with Paris green, two ounces to 50 gallons of water; be sure to keep it well stirred, and use with caution. Never use London purple on peach trees.

Grape Rot and Mildew, use the Bordeaux Mixture.

Currants and Gooseberries. To destroy the worms, spray with powdered white hellebore, one ounce in three gallons of water, as soon as the worms appear. To destroy the yellow aphid, spray with kerosene emulsion early in the season. To prevent mildew, use one-half ounce potassium sulphide to one gallon of water.

FORMULAS.

Kerosene Emulsion. In making the kerosene emulsion for spraying trees for lice, be sure to follow the correct method. Dissolve in two quarts of water, one quart of soap or $\frac{1}{4}$ pound of hard soap by heating to the boiling point. Then add one pint of kerosene oil, and stir violently for from three to five minutes. This may be done by using a common force pump and putting the end of the hose back into the mixture again. This mixes the oil permanently, so that it will never separate, and it may be diluted easily at pleasure. This mixture should be diluted to twice its bulk with water, or about 14 times as much water as kerosene. The kerosene emulsion is successful in destroying cattle lice and sheep ticks, as well as all varieties of plant lice.

Bordeaux Mixture. Six pounds of sulphate of copper are dissolved in six gallons of water; in another vessel four pounds of fresh lime are slacked in six gallons of water. After the latter solution has cooled, slowly turn into the other solution, and add ten gallons of water. This, when all is thoroughly mixed and strained, is ready for use. In straining this mixture, reject all of the lime sediment, using only the clear liquid; strain the whitewash through a coarse gunny sack, stretched over the head of a barrel.

Treatment of the Black Rot and Mildew of the Grape, Pear Scab and Leaf Blight.

Bordeaux Mixture. (A) Dissolve 16 pounds of sulphate of copper in 22 gallons of water; in another vessel slack 30 pounds of lime in 6 gallons of water. When the last mixture has cooled, pour it slowly into the copper solution, taking care to mix the fluids thoroughly by constant stirring. It is well to have this compound prepared some days before it is required for use. It should be well stirred before applying.



CLEMATIS JACKMANII.